South Windsor

South Windsor is a suburban community northeast of Hartford. It encompasses roughly 28.5 square miles, with a population of about 26,900. The varied topography of South Windsor contributes to three watersheds; primarily to the main stem of the Connecticut River Watershed, but also to the Scantic River in the north and the Hockanum River to the east. The Connecticut River flows along the western boundary. Other major watercourses include the Podunk and Scantic Rivers and Averys, Bancroft, Dry, Newberry and Waples Brooks. Interstate 291 travels through the southwestern corner of South Windsor; other major transportation routes include state routes 5, 30, 74 and 194. Principal industries include commercial and institution food distributors, fuel cell power plants, machine and equipment design and manufacture among others. South Windsor also has significant retail development located in the southeast corner of town, around the Buckland Hills regional mall, and at the Shops at Evergreen Walk.

Challenges

Flooding and severe storms are the primary natural hazards of concern of the Town of Windsor. Flooding has generally localized impacts while severe storms are more likely to have town wide impacts. Severe storms can result in prolonged power outages, disruptions to communications and transportation, and debris management issues.

The Town of South Windsor, through its Flood Plain Regulations (Sec. 5.2 of the Zoning Regulations, revisions adopted in September 2008) mitigates hazards caused by natural processes (floods) by prohibiting the construction of structures designed for human habitation within those zones. The regulations further mitigate hazards by specifying construction standards by which all other structures must comply that take into account flooding effects on structures. Currently, in A or AE zones there are 32 main houses, 17 barns, 5 garages, 3 gazebos, 68 sheds, 11 trailers, a wastewater treatment plant, and 2 pump stations. The National Flood Insurance Program has paid 16 property damage claims in South Windsor totaling $117,095 to-date. South Windsor has had four Repetitive Loss Property claims on one property totaling $42,689 to-date. The town is also aware of two houses on Ferry Lane and two on Main Street that have been damaged more than once by floods; although it does not appear these structures are insured under the National Flood Insurance Program. Since 2008, there has been no construction or demolition in the floodplains.

A significant flood event could result in much damage in flood prone areas of the town. CRCOG used FEMA’s Hazus-MH model to analyze the risks that the community might face from flooding. The model estimates that economic losses to the town including residential and commercial damage and business interruptions due to a flood having a 1% chance of occurring any given year (the 100-year flood) would be over $33 million. The impacts of such a flood are summarized below:

<table>
<thead>
<tr>
<th>Estimated Damages from 100-Year Flood</th>
<th>Households Displaced</th>
<th>People Needing Shelter</th>
<th>Buildings at Least Moderately Damaged</th>
<th>Total Estimated Economic Losses</th>
<th>Total Residential Building &amp; Content Losses</th>
<th>Total Commercial, Industrial &amp; Other Building &amp; Content Losses</th>
<th>Total Business Interruption Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>289</td>
<td>542</td>
<td>48</td>
<td>$33,240,000</td>
<td>$16,370,000</td>
<td>$16,800,000</td>
<td>$80,000</td>
</tr>
</tbody>
</table>
CRCOG also used FEMA’s Hazus-MH model to analyze the risks that the Town of South Windsor might face from a hurricane as powerful as the 1938 hurricane. The model estimates that economic losses to the town including residential and commercial damage and business interruptions due to such a Category 3 hurricane would be over $131 million. The impacts of such a storm are summarized below:

<table>
<thead>
<tr>
<th>Estimated Damages from a 1938 Strength Hurricane</th>
<th>Households Displaced</th>
<th>28</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>People Needing Shelter</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Buildings at Least Moderately Damaged</td>
<td>1009</td>
</tr>
<tr>
<td></td>
<td>Buildings Completely Damaged</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Total Estimated Economic Losses</td>
<td>$131,400,000</td>
</tr>
<tr>
<td></td>
<td>Total Residential Building Losses</td>
<td>$90,700,000</td>
</tr>
<tr>
<td></td>
<td>Total Commercial, Industrial &amp; Other Building Losses</td>
<td>$26,600,000</td>
</tr>
<tr>
<td></td>
<td>Total Business Interruption Losses</td>
<td>$14,100,000</td>
</tr>
<tr>
<td></td>
<td>Total Debris Generated</td>
<td>45,147 tons</td>
</tr>
<tr>
<td></td>
<td>Truckloads (at 25 tons/truck) of building debris</td>
<td>455</td>
</tr>
</tbody>
</table>

According to information from the Connecticut Department of Emergency Management and Homeland Security, the three federally declared natural disasters of 2011 resulted in total expenses to the municipality and other local agencies of over $7.1 million. These expenses include debris and snow removal, emergency protective measures and repairs to damaged infrastructure and buildings but do not include damages experienced by private citizens and businesses. There were two commercial building roofs damaged during Storm Alfred in October 2011.

<table>
<thead>
<tr>
<th>2011 Disasters Damage Amounts Eligible for 75% Reimbursement Under FEMA Public Assistance Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant: Municipality &amp; Other Agencies (i.e., Fire Districts, Schools, and Private Non-Profit Agencies)</td>
</tr>
<tr>
<td>Town of South Windsor</td>
</tr>
<tr>
<td>South Windsor Other</td>
</tr>
<tr>
<td>South Windsor Total</td>
</tr>
</tbody>
</table>

Goals, Objectives and Strategies

The Town reassessed and evaluated the goals, objectives and mitigation actions identified in the 2008 Plan. Some mitigation actions were restated and for some, lead agencies or priorities were revised. The Town also identified a number of new mitigation actions to initiate over the next five years.

**GOAL: MINIMIZE LOSS OF LIFE AND PROPERTY AND ECONOMIC DISRUPTION RESULTING FROM NATURAL DISASTERS**
Objective 1:
Ensure dams and detention basins are in good repair.

Strategic Actions:

1.1 Assess and make recommendations on public and private structures including, but not limited to, Avery Heights dam, dam at Lake St., dam at Veteran's Park off Parkview Dr., and Dzen's dam.
   Lead: Parks and Grounds, Administration
   Priority: Medium
   Status: Will be assessed on a case by case basis for private structures and public structures will be inspected annually.
   Potential Funding Source: General funds, grants and loans
   Timeframe: Annual inspections throughout 2014-2019

1.2 Prioritize recommended measures and work with property owners to implement.
   Lead: Parks and Grounds, Administration
   Priority: Medium
   Status: Will be assessed on a case by case basis
   Potential Funding Source: General funds, grants/loans where appropriate
   Timeframe: 2014-2019

Objective 2:
Improve communication capabilities to inform resident population.

Strategic Actions:

2.1 Continue effort to require new employees to sign on to Everbridge System.
   Lead: Emergency Management, Administration
   Priority: Medium
   Status: In the 2008 Plan, the Town proposed to purchase a call-back communication system. The Everbridge System was purchased and the Town is now proposing to ensure that staff is trained to fully utilize this communications system. New staff will be trained when hired.
   Potential Funding Source: General Fund
   Timeframe: 2014-2019

2.2 Harden equipment for potential solar activity
   Lead: IT, Public Works, Administration
   Priority: Medium
   Status: This is a new initiative.
   Potential Funding Source: General Fund
   Timeframe: 2014-2019
Objective 3:  
Ensure the protection of private properties at greatest risk.

Strategic Action:
3.1 Investigate participating in FEMA’s Community Rating System.  
Lead: Planning, Administration  
Priority: Medium  
Status: Deferred; however, the Town will continue to consider participation in CRS.  
Potential Funding Source: General Fund  
Timeframe: 2014-2019

GOAL: REDUCE TIME REQUIRED TO RESTORE COMMERCIAL POWER

Objective 1:  
Improve tree limb maintenance to reduce number/area of power outages.

Strategic Actions:
1.1 Continue to contract out tree maintenance work, and to work with CL&P to maintain right-of-ways.  
Lead: Public Works, Administration  
Priority: Medium  
Status: In 2008, the Town proposed to inventory trees in the right-of-way, develop a maintenance plan and contract out tree maintenance work. Due to the cleanup of the large number of downed trees and limbs following Storms Irene and Alfred, much work was done to reduce future risks of power outages due to fallen trees and limbs. For the Plan Update, the Town has restated the manner in which it will address tree maintenance but will continue efforts to reduce potential for power outages due to fallen trees and limbs.  
Potential Funding Source: General funds, Utility  
Timeframe: 2014-2019

1.2 Improve coordination with State DOT for emergency staging and management for debris, snow, and all other emergencies.  
Lead: Public Works, Administration  
Priority: High  
Status: This is a new initiative.  
Potential Funding Source: General Fund  
Timeframe: 2014-2019

1.3 Work with CRCOG and State DEEP to establish a regional debris management site.  
Lead: Public Works, Administration  
Priority: High
Status: This is a new initiative.  
Potential Funding Source: General Fund, grants  
Timeframe: 2014-2019

1.4 Establish a local debris processing site at Barton Property  
Lead: Public Works, Administration  
Priority: High  
Status: This is a new initiative.  
Potential Funding Source: General Fund  
Timeframe: 2013-2015

Objective 2:  
Improve communication and coordination with electric utility.

Strategic Actions:

2.1 Continue to meet with CL&P representatives to address problems including the implementation of a lock out/tag out system.  
Lead: Public Works, Administration, Emergency Management  
Priority: High  
Status: This effort, identified in the 2008 Plan, is an established practice of the Town and was not included in the Plan Update because it is felt it is a routine effort and is also accomplished through the regional communications effort listed below. CL&P has assigned local liaisons to work directly with the Town.

2.1 Continue regional efforts to improve communications with CL&P and to address problems including implementation of a lockout/tag out system.  
Lead: Public Works, Administration, Emergency Management  
Priority: High  
Status: The town has and will continue to support the region’s efforts to improve communications with CL&P particularly through participation in CREPC.  
Potential Funding Source: General Fund  
Timeframe: 2014-2019

GOAL: MINIMIZE LOSSES TO EXISTING AND FUTURE STRUCTURES FROM SEVERE WEATHER

Objective 1:  
Use land use regulations to reduce risk.

Strategic Actions:

1.1 Continue to enforce regulations requiring the dedication of open space in new developments.  
Lead: Planning
1.2 Continue to enforce wetlands regulations.

Lead: Inland Wetlands Commission, Wetlands Agent

Priority: Medium

Status: As new developments are proposed and reviewed, Town staff ensures that existing regulations are followed. Because this is an established practice, the Town reassessed the priority assigned to this initiative, changing it from High to Medium.

Potential Funding Source: General Fund

Timeframe: 2014-2019

Objective 2:

Review and improve enforcement of building codes.

Strategic Actions:

2.1 Ensure that privately owned and installed generators are installed correctly.

Lead: Building

Priority: Medium

Status: This is an established practice and will be handled on a case by case basis.

Potential Funding Source: General Fund

Timeframe: 2014-2019

2.2 Will consider whether in the future there is a need to adopt a regulation that requires senior housing developments to install some kind of generator to power at least a communal space.

Lead: Planning, Building

Priority: Medium

Status: Deferred: Reevaluation of the need for this regulation will be undertaken during 2014-2019

Potential Funding Source: General Fund

Timeframe: 2014-2019

Objective 3:

Improve communication with property owners on measures they can take to reduce their losses from severe weather.
Strategic Actions:

3.1 Use municipal website, Facebook, Twitter, Everbridge, You-Tube, and all other available means of social media to educate residents on emergency preparedness.
   Lead: Emergency Management, Administration
   Priority: Medium
   Status: The Town routinely makes updates to emergency preparedness materials posted on its website and proposes to expand this outreach to other forms of social media. Periodic updates and outreach will be conducted throughout the plan period (2014-2019) and particularly in advance of anticipated major events.
   Potential Funding Source: General Fund

3.2 Continue to maintain special needs population list.
   Lead: Emergency Management, Health Department
   Priority: Medium
   Status: The Health Department updated its emergency outreach contact information in FY 2013. This effort will continue and periodic updates will be made throughout the plan period.
   Potential Funding Source: General Fund
   Timeframe: 2014-2019

3.3 Support replacement of equipment
   Lead: Administration, Town Council
   Priority: High
   Status: This is a new initiative.
   Potential Funding Source: General Fund

3.4 Provide generators for Town shelters, Town Garage, Town Hall, and Police Department
   Lead: Administration, Town Council
   Priority: High
   Status: This is a new initiative.
   Potential Funding Source: General Fund, grants
   Timeframe: 2014-2019 – during annual budget and grant application processes

3.5 Purchase cots, food supplies, and other equipment for emergency operations.
   Lead: Administration, Town Council
   Priority: High
   Status: This is a new initiative.
   Potential Funding Source: General Fund, grants
   Timeframe: 2014-2019 – during annual budget and grant application processes
3.6 Produce GIS mapping of critical town facilities.
Lead: IT, Emergency Management
Priority: High
Status: This is a new initiative.
Potential Funding Source: General Fund
Timeframe: 2014-2019

3.7 Establish MOU with local food distributors and special emergency response equipment suppliers for emergency services.
Lead: Emergency Management, administration
Priority: High
Status: This is a new initiative.
Potential Funding Source: General Fund
Timeframe: 2014-2019

3.8 Schedule quarterly reviews of GIS layers (data sets) and Town Emergency Operations Plan.
Lead: Emergency Management, Administration
Priority: High
Status: This is a new initiative.
Potential Funding Source: General Fund
Timeframe: Quarterly reviews to be conducted throughout 2014-2019
Map 52: South Windsor Population Density, Dams and Flood Zones
Map 53: South Windsor Flood Plains, Repetitive Loss Areas, Dams and Important Facilities